



# Australian Bureau of Statistics

## 6291.0.55.003 - Labour Force, Australia, Detailed, Quarterly, Feb 2018

Previous ISSUE Released at 11:30 AM (CANBERRA TIME) 29/03/2018

## Summary

### Main Features

Data from the monthly Labour Force Survey are released in two stages. The Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) and Labour Force, Australia, Detailed, Quarterly (cat. no. 6291.0.55.003) are part of the second release, and include detailed data not contained in the Labour Force, Australia (cat. no. 6202.0) product set, which is released one week earlier.

The Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) is released monthly. Labour Force, Australia, Detailed, Quarterly (cat. no. 6291.0.55.003) includes data only collected in February, May, August and November (including industry and occupation).

Since these products are based on the same data as the Labour Force, Australia (cat. no. 6202.0) publication, the 6202.0 Labour Force, Australia Explanatory Notes are relevant to both releases.

## Insights from the Original Data

### INSIGHTS FROM THE ORIGINAL DATA

#### SAMPLE COMPOSITION

The Labour Force Survey sample can be thought of as comprising eight sub-samples (or rotation groups), with each sub-sample remaining in the survey for eight months, and one rotation group "rotating out" each month and being replaced by a new group "rotating in". This sample rotation is important in ensuring that seven-eighths of the sample are common from one month to the next, to ensure that changes in the estimates reflect real changes in the labour market, rather than the sample. In addition, the replacement sample is generally selected from the same geographic areas as the outgoing one, as part of a representative sampling approach.

When considering movements in the original estimates, it is possible to decompose the sample into three components:

- the matched common sample (survey respondents who responded in both January and February);
- the unmatched common sample (survey respondents who responded in February but

- who did not respond in January, or vice versa); and
- the incoming rotation group (survey respondents who replaced respondents who rotated out in January).

The detailed decomposition of each of these movements is included in the data cube 'Insights From the Original Data'.

In considering the three components of the sample, it is important to remember that the matched common sample describes the change observed for the same respondents in January and February, while the other two components reflect differences between the aggregate labour force status of different groups of people.

While the rotation groups are designed to be representative of the population, the outgoing and incoming rotation groups will almost always have somewhat different characteristics, as a result of the groups representing a sample of different households and people. The design of the survey, including the weighting and estimation processes, ensures that these differences are generally relatively minor and seeks to ensure that differences in characteristics of rotation groups do not affect the representativeness of the survey and its estimates. Monthly estimates are always designed to be representative of their respective months, regardless of the relative contribution of the three components of the sample.

## **INCOMING ROTATION GROUP**

In original terms, the incoming rotation group in February 2018 had a higher employment to population ratio than the group it replaced (61.3 per cent in January, up to 62.1 per cent in February 2018), and was lower than the ratio for the entire sample (62.2 per cent).

The full-time employment to population ratio of the incoming rotation group was higher than the group it replaced (42.1 per cent in January 2018 and up to 42.9 per cent in February 2018), and higher than the entire sample (42.8 per cent).

The unemployment rate of the incoming rotation group was 0.4 percentage point higher than the whole sample (6.4 per cent, compared to 6.0 per cent), and it replaced a group with a lower rate (5.6 per cent in January). Its participation rate was above that of the sample as a whole (66.3 per cent, compared to 66.2 per cent), and also above the group it replaced (64.9 per cent in January).

## **OUTGOING ROTATION GROUP**

In looking ahead to the March 2018 estimates, the outgoing rotation group in February 2018, which will be replaced by a new incoming rotation group in March 2018, has a lower employment to population ratio (62.0 per cent in February 2018) compared to the sample as a whole (62.2 per cent). The full-time employment to population ratio (42.5 per cent) is lower than the ratio for the entire sample (42.8 per cent).

In original terms, the unemployment rate for the outgoing rotation group in February 2018 is lower than the sample as a whole (5.9 per cent, compared to 6.0 per cent). The participation rate for the outgoing rotation group in February 2018 is 65.8 per cent, which is lower than the rate for the whole sample (66.2 per cent).

## **THE IMPORTANCE OF TREND DATA**

As the gross flows and rotation group data are presented in original terms they are not directly comparable to the seasonally adjusted and trend data discussed elsewhere in the commentary, and are included to provide additional information for the original data. Since the original data are unadjusted, they have a considerable level of inherent sampling variability, which is specifically adjusted for in the trend series. The trend data provide the best measure of the underlying behaviour of the labour market and are the focus of the commentary in this publication.

## **What's new in the labour force**

### **WHAT'S NEW IN THE LABOUR FORCE**

#### **UPCOMING ANNUAL SEASONAL REANALYSIS**

Every year, the ABS conducts an "Annual Seasonal Re-analysis" of the Labour Force time series, on estimates up to March. Minor adjustments are made as a result of this annual review process (for more information see Explanatory Note 33). The outcomes of the 2018 review will be incorporated in the estimates published in the March 2018 issue of *Labour Force, Australia* (cat. no. 6202.0), which will be released on 19 April 2018.

While seasonal factors for the complete time series are estimated every month, they are reviewed annually at a more detailed level than is possible on a monthly basis, to ensure that time series estimates are of the highest quality. As with previous reviews, the ABS expects revisions to seasonally adjusted and trend estimates arising from the annual seasonal reanalysis to be minimal.

#### **UPCOMING IMPROVEMENTS TO TREND ESTIMATION**

As part of the 2018 Annual Seasonal Reanalysis, the ABS will also implement some minor improvements to trend estimation for Labour Force time series. These improvements will reduce the extent of revisions in trend series over time, providing particular benefits for series with smaller populations (eg. states and territories with smaller populations).

For further information outlining the improved approach, including indicative impacts of the change to trend estimates, please see the article "Improvements to Trend Estimation" in the February 2018 issue of *Labour Force, Australia* (cat. no. 6202.0).

The methods used to calculate seasonally adjusted estimates will not be changed.

#### **UPDATE ON MONTHLY UNDEREMPLOYMENT ESTIMATES - TREND AND SEASONALLY ADJUSTED DATA**

The ABS previously advised that the range of underemployment and underutilisation measures would be expanded in the March 2018 issue of *Labour Force, Australia* (cat. no. 6202.0), to be released on 19 April 2018. However, due to the significant amount of effort required to implement the new series into aging ABS systems and infrastructure, the implementation of the monthly underutilisation measures has been delayed.

The ABS is committed to providing high quality monthly underutilisation data and the delay will afford additional time for testing and data validation, and also enable the ABS to leverage the range of improvements, including improvements to trend estimation, made possible by the upcoming Annual Seasonal Reanalysis (ASR).

The ABS will provide further advice on the revised implementation schedule in the next issue of *Labour Force, Australia* (cat. no. 6202.0). We thank users for their patience and understanding with this delay.

## Improvements to Trend Estimation

### IMPROVEMENTS TO TREND ESTIMATION

#### INTRODUCTION

As part of the 2018 Annual Seasonal Reanalysis (ASR) of estimates published in *Labour Force, Australia* (cat no. 6202.0), the ABS will be implementing an improved method of trend estimation. This article outlines details of the new trend method including the benefits and some indicative impacts on Labour Force estimates.

#### BACKGROUND

Period-to-period movements of the original and seasonally adjusted series are typically volatile due to the inherent variation in the data, captured by the 'irregular' component of the time series decomposition. Smoothing the irregular component of seasonally adjusted series is helpful for identifying the underlying level of socioeconomic activity. The ABS generally publishes the seasonally adjusted estimates of a raw series along with a smoothed version of the data, known as the trend. The process of smoothing seasonally adjusted data is known as "trending". Given there is an inherent and unavoidable level of volatility in original and seasonally adjusted series, the ABS encourages users to analyse both the seasonally adjusted and trend series which complement each other. The trend series provides the best indicator of underlying behaviour of time series. In the case of Labour Force statistics, trend estimates provide the best measure of the underlying behaviour of the labour market. Further information on seasonal adjustment and trend can be found in *Time Series Analysis: The Basics*.

The ABS established its approach to trend estimation in the late 1980s when trend statistics were first introduced into output. The approach enabled users to calculate the trend for themselves by directly smoothing the published seasonally adjusted series using the Henderson 13-term trend filter. A feature of this approach is that the trend is affected by outliers identified in the estimation of seasonal adjustment factors. While the adopted method supported some users in their interpretation of trend series, it also resulted in some quality compromises. Since the seasonal outliers are not treated, a 'ripple' effect can arise in the trend series in some situations, particularly for series with higher volatility such as those with a high level of sample error. These 'ripples' are effectively spurious turning points.

Over the decades, other national statistical organisations have also moved to publish trend series to complement the seasonally adjusted series. Generally they have adopted the core X-11 ARIMA trend which the ABS will also now adopt.

The key differences between the core X-11 trend and the traditional ABS approach to trend pertain to the treatment of "trend breaks" and the X-11 algorithm's automatic internal corrections applied in the derivation of seasonal factors. The absence of the X-11 algorithm's automatic internal corrections is known to create a "ripple" effect in ABS trend series in some situations, particularly in series with higher levels of volatility, such as those with relatively higher levels of sample error.

## **BENEFITS OF THE NEW TREND METHOD**

A review of the current trend estimation conducted recently has found that there are a number of benefits in adopting a more pure definition of the trend.

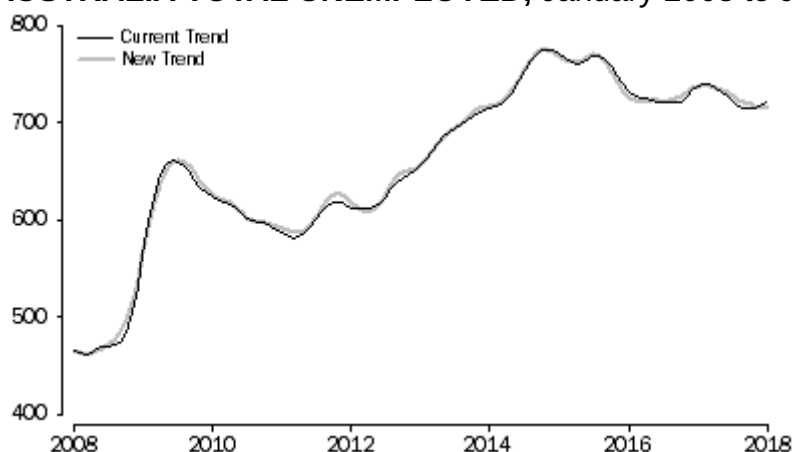
The improved trend method has a relatively minor impact on the published trend values of labour force estimates at the Australia level and for the larger states, such as New South Wales and Victoria. However, the new method provides particularly strong benefits by removing the "ripple" effects which tend to be more inherent in the current trend series for smaller jurisdictions and lower level estimates. The result of removing these "ripple" effects is trend estimates which are less volatile, and less prone to revision over time.

Improvements to trend estimation have no impact on the estimation of seasonally adjusted estimates. The new method only changes the way in which the irregular component of a time series is removed from the seasonally adjusted data to produce the published trend estimate.

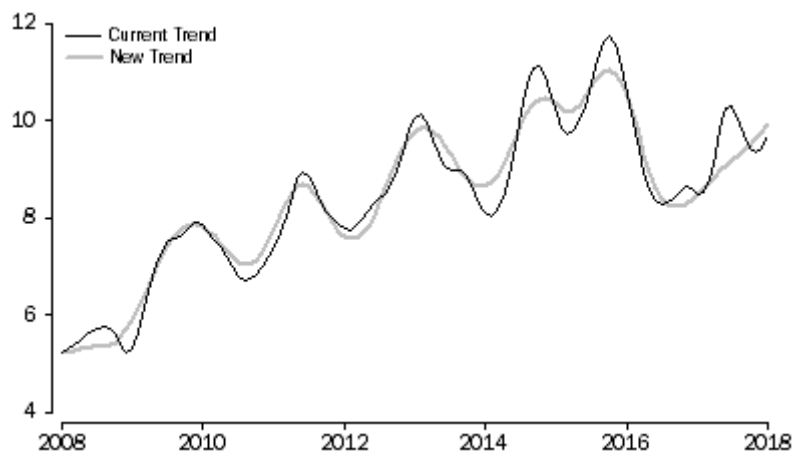
## **IMPACTS ON LABOUR FORCE ESTIMATES**

The following graphs provide an illustration of the impacts on Labour Force estimates when the new trend method is implemented. These are indicative impacts only and the results will vary slightly when the method is implemented in the March 2018 release on 19 April 2018.

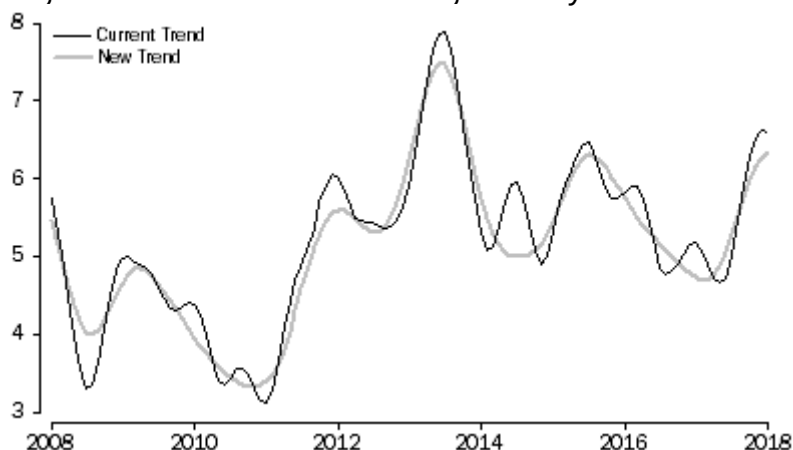
**GRAPH 1, AUSTRALIA TOTAL UNEMPLOYED, January 2008 to January 2018**



**GRAPH 2, ACT TOTAL UNEMPLOYED, January 2008 to January 2018**



**GRAPH 3, NT TOTAL UNEMPLOYED, January 2008 to January 2018**



## BENEFITS FOR OTHER TREND SERIES

Since the benefits to improving trend are greatest for Labour Force statistics, this change has been implemented in these series first, ahead of further changes across the range of economic statistics produced by the ABS. Information on when changes will be made to other trend series will be published in their respective statistical releases, over time.

## FURTHER INFORMATION

For any queries regarding the implementation of these changes contact the National Information Referral Service on 1300 135 070, or via e-mail at [client.services@abs.gov.au](mailto:client.services@abs.gov.au).

## Article Archive

This section provides an archive of articles and analysis published in Labour Force, Australia (cat. no. 6202.0) and Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) and Labour Force, Australia, Detailed, Quarterly (cat. no. 6291.0.55.003), promoting the effective use of labour force statistics. Articles are sorted by publication month.

Articles on labour related topics are also available in Australian Labour Market Statistics (cat. no. 6105.0) and Australian Social Trends (cat. no. 4102.0).

## **LABOUR FORCE SURVEY ARCHIVE**

### **2018**

#### **January**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)  
500th Issue of 6202.2 (cat. no. 6202.0)

### **2017**

#### **December**

Advice on Reporting Regional Labour Force Data (cat. no. 6291.0.55.001)

#### **November**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

#### **October**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)  
Major Rebenchmarking of Labour Force Series (cat. no. 6202.0.55.003)

#### **September**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)  
Labour Force Explained

#### **August**

Labour Force Pivot Tables (cat. no. 6291.0.55.001)

#### **July**

Labour Force Pivot Tables (cat. no. 6291.0.55.001)

#### **June**

What's New in the Labour Force (cat. no. 6202.0)  
Labour Force Pivot Tables (cat. no. 6291.0.55.001)

#### **April**

Online Collection in the Labour Force Survey (cat. no. 6202.0, cat. no. 6291.0.55.001)  
Labour Force Pivot Tables (cat. no. 6291.0.55.001)

#### **March**

Annual Seasonal Re-analysis (cat. no. 6202.0, cat. no. 6291.0.55.001)

#### **February**

Changes to Filter Lengths used in Labour Statistics (cat. no. 6202.0, cat. no. 6291.0.55.001)  
What's New in the Labour Force (cat. no. 6291.0.55.003)  
Changes to Filter Lengths used in Labour Statistics (cat. no. 6291.0.55.003)

### **2016**

#### **November**

Spotlight on Underemployment (cat. no. 6202.0)  
Labour Force Pivot Tables (cat. no. 6291.0.55.003)

#### **September**

Labour Force Pivot Tables (cat. no. 6291.0.55.001)

### **August**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

Online Collection In The Labour Force Survey (cat. no. 6202.0)

Expanded Education data from the Labour Force Survey (cat. no. 6291.0.55.003)

### **July**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

Revisions to Monthly hours worked in all jobs (cat. no. 6202.0)

Advice on Reporting Regional Labour Force Data (cat. no. 6291.0.55.001)

### **March**

Annual Seasonal Re-analysis (cat. no. 6202.0, cat. no. 6291.0.55.001)

### **February**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

Online Collection In The Labour Force Survey (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

### **January**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

## **2015**

### **December**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

### **November**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

Update on Recommendation 7 from the Independent Technical Review (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

Measures of Underemployment and Underutilisation (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

Measures of full-time, part-time job search (cat. no. 6291.0.55.001)

Measures of leave entitlements (cat. no. 6291.0.55.003)

Measures of current duration of employment (cat. no. 6291.0.55.003)

Volume measures of underutilisation (cat. no. 6291.0.55.003)

Measures of retrenchment (cat. no. 6291.0.55.003)

Measures of sector of main job (cat. no. 6291.0.55.003)

### **October**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

### **September**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

### **August**

Online Collection in the Labour Force Survey (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

### **July**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)



Progress with recommendations from the Independent Technical Review (cat. no. 6202.0, cat. no. 6291.0.55.001)

Change to Status in Employment Output (cat. no. 6202.0, cat. no. 6291.0.55.001)

## **June**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

Assessing Volatility in the Labour Force Series (cat. no. 6291.0.55.001)

Update on Recommendations 10 and 11 from the Independent Technical Review (cat. no. 6202.0, cat. no. 6291.0.55.001)

## **May**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

Update on Recommendation 7 from the Independent Technical Review (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

## **April**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

## **March**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

Annual Seasonal Reanalysis (cat. no. 6202.0, cat. no. 6291.0.55.001)

Update on Recommendations from the Independent Technical Review (cat. no. 6202.0, cat. no. 6291.0.55.001)

## **February**

What's new in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

Online Collection in the Labour Force Survey (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

Rebenchmarking Labour Force Estimates (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

## **January**

What's new in the Labour force (cat. no. 6202.0, cat. no. 6291.0.55.001)

# **2014**

## **December**

What's new in the Labour force (cat. no. 6202.0, cat. no. 6291.0.55.001)

## **November**

What's new in the Labour force (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

Independent Technical Review into the Labour Force Survey and ABS Response (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

## **October**

Removing the effect of Supplementary Surveys from seasonally adjusted estimates (cat. no. 6202.0, cat. no. 6291.0.55.001)

## **September**

Changes in this and upcoming labour force issues (cat. no. 6202.0, cat. no. 6291.0.55.001)

## **August**

Changes in this and upcoming labour force issues (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

## **July**

What's new in the Labour force (cat. no. 6202.0, cat. no. 6291.0.55.001)

## **June**

What's new in the Labour force (cat. no. 6202.0, cat. no. 6291.0.55.001)

## **May**

What's new in the Labour force (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

## **February**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

Annual Seasonal Reanalysis (cat. no. 6202.0)

Analysis of changes to Labour Force Regional Estimates (cat. no. 6291.0.55.003)

Rebenchmarking Labour Force Estimates to the 2011 Census of Population and Housing (cat. no. 6291.0.55.003)

## **January**

Rebenchmarking Labour Force Estimates to the 2011 Census of Population and Housing (cat. no. 6202.0)

Analysis of changes to Labour Force Regional Estimates (cat. no. 6291.0.55.001)

# **2013**

## **December**

What's New in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

Understanding the Australian Labour Force using ABS statistics (cat. no. 6202.0)

## **November**

What's new in the Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

## **September**

What's new in the Labour Force (cat. no. 6202.0)

Understanding full-time/part-time status in the Labour Force Survey (cat. no. 6202.0)

## **June**

What's new in the Labour Force (cat. no. 6202.0)

Fact Sheet Did You Know - Underemployment (cat. no. 6202.0)

## **May**

What's new in Labour Force (cat. no. 6202.0)

New Labour Force Sample Design (cat. no. 6202.0)

Annual Seasonal Reanalysis (cat. no. 6202.0)

## **April**

What's New in Labour Force (cat. no. 6202.0)

Transition to online collection of the Labour Force Survey (cat. no. 6202.0)

## **February**

What's New in the Labour Force (cat. no. 6202.0)  
Estimating Jobs in the Australian Labour Market (cat. no. 6202.0, cat. no. 6291.0.55.001)  
Understanding Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)  
Employed Persons,Trend Estimates (cat. no. 6202.0)  
Unemployed Persons,Trend Estimates (cat. no. 6202.0)  
Aggregate Monthly Hours Worked,Trend Estimates (cat. no. 6202.0)

### **January**

What's new in Labour Force (cat. no. 6202.0)  
Forthcoming improvements to the content of the Labour Force and Labour Supplementary Surveys (cat. no. 6202.0)  
Understanding Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

## **2012**

### **November**

Rebenchmarking of Labour Force Series (cat. no. 6202.0)  
Understanding Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.003)

### **August**

What's New in the Labour Force (cat. no. 6291.0.55.003)  
Understanding Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.003)  
Employed Persons,Trend Estimates (cat. no. 6202.0)  
Unemployed Persons,Trend Estimates (cat. no. 6202.0)  
Aggregate Monthly Hours Worked,Trend Estimates (cat. no. 6202.0)

### **July**

Upcoming changes to the Labour Force Survey (cat. no. 6202.0)  
Understanding Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

### **June**

What's New in Labour Force (cat. no. 6202.0)  
Labour Household Surveys content review and the Labour Force Survey (cat. no. 6202.0)  
Understanding Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

### **May**

What's New in the Labour Force (cat. no. 6291.0.55.003)  
Employment and mining in Queensland, New South Wales and Western Australia (cat. no. 6202.0)  
Understanding Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

### **April**

Population Benchmarks and Labour Force Survey (cat. no. 6202.0, cat. no. 6291.0.55.001)  
ABS Response to recent concerns expressed about employment estimates (cat. no. 6202.0)  
Understanding Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

### **March**

Annual Seasonal Reanalysis (cat. no. 6202.0)  
Understanding Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

## **February**

Exploring Labour Force Data on joblessness (cat. no. 6202.0)

Understanding Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001)

## **January**

Employment level estimates versus employment to population explained (cat. no. 6202.0)

## **2011**

### **November**

Understanding Labour Force (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

Aggregate monthly hours worked, Trend estimates (cat. no. 6202.0)

Underemployment rate, Trend estimates (cat. no. 6202.0)

Labour force underutilisation rate, Trend estimates (cat. no. 6202.0)

### **February**

Historical Revisions (cat. no. 6202.0, cat. no. 6291.0.55.001, cat. no. 6291.0.55.003)

### **January**

Impact of the floods on the Labour Force Survey (cat. no. 6202.0, cat. no. 6291.0.55.001)

Employed Persons, Trend estimates (cat. no. 6202.0)

Unemployed Persons, Trend estimates (cat. no. 6202.0)

## **About this Release**

A range of quarterly Excel spreadsheets, pivot tables and SuperTABLE data cubes.

Super TABLE data cubes will be discontinued after the August 2017 release.

The quarterly spreadsheets contain broad level data covering all the major items of the Labour Force Survey in time series format, including seasonally adjusted and trend estimates. The quarterly data cubes and pivot tables contain more detailed and cross classified original data than the spreadsheets.

## **Explanatory Notes**

### **Explanatory Notes**

Data from the monthly Labour Force Survey are released in two stages. The Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) and Labour Force, Australia, Detailed, Quarterly (cat. no. 6291.0.55.003) are part of the second release, and include detailed data not contained in the Labour Force, Australia (cat. no. 6202.0) product set, which is released one week earlier.

The Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) is released monthly. Labour Force, Australia, Detailed, Quarterly (cat. no. 6291.0.55.003)

includes data only collected in February, May, August and November (including industry and occupation).

Since these products are based on the same data as the Labour Force, Australia (cat. no. 6202.0) publication, the 6202.0 Labour Force, Australia Explanatory Notes are relevant to both releases.

## Quality Declaration - Summary

### QUALITY DECLARATION - SUMMARY

#### INSTITUTIONAL ENVIRONMENT

Labour Force statistics are compiled from the Labour Force Survey which is conducted each month throughout Australia as part of the Australian Bureau of Statistics (ABS) household survey program. For information on the institutional environment of the Australian Bureau of Statistics (ABS), including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

#### RELEVANCE

The Labour Force Survey provides monthly information about the labour market activity of Australia's resident civilian population aged 15 years and over. The Labour Force Survey is designed to primarily provide estimates of employment and unemployment for the whole of Australia and, secondarily, for each state and territory.

#### TIMELINESS

The Labour Force Survey enumeration begins on the Sunday between the 5th and 11th of the month, except for the Christmas and New Year holiday period. In December enumerations starts between the 3rd and 9th (4 weeks after November enumeration begins). In January enumeration starts between the 7th and 13th (5 weeks after December enumeration begins).

Key estimates from the Labour Force Survey are published in two stages. The first, *Labour Force, Australia* (cat. no. 6202.0), is released 39 days after the commencement of enumeration for the month, with the exception of estimates for December which are published 46 days after the commencement of enumeration.

The second stage includes detailed data that were not part of the first stage and are published in *Labour Force, Australia, Detailed - Electronic Delivery* (cat. no. 6291.0.55.001) and *Labour Force, Australia, Detailed, Quarterly* (cat. no. 6291.0.55.003). The second stage is released 7 days after the first stage.

#### ACCURACY

The Labour Force Survey is based on a sample of private dwellings (approximately 26,000

houses, flats etc) and non-private dwellings, such as hotels and motels. The sample covers about 0.32% of the Australian civilian population aged 15 years or over. The Labour Force Survey is designed primarily to provide estimates of key labour force statistics for the whole of Australia and, secondarily, for each state and territory.

Two types of error are possible in an estimate based on a sample survey: non-sampling error and sampling error.

Non-sampling error arises from inaccuracies in collecting, recording and processing the data. Every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures. Non-sampling error also arises because information cannot be obtained from all persons selected in the survey. The Australian Labour Force Survey receives a higher level of co-operation from individuals in selected dwellings compared to other countries, with the average response rate over the past 3 years being 93 per cent, and the average rate over the past year being 92.5 per cent (to the nearest quarter of a per cent, in rounded terms). See Glossary for definition of response rate.

Sampling error occurs because a sample, rather than the entire population, is surveyed. One measure of the likely difference resulting from not including all dwellings in the survey is given by the standard error. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all dwellings had been included in the survey, and about nineteen chances in twenty that the difference will be less than two standard errors.

Standard errors of key estimates and movements since the previous month are available in *Labour Force, Australia* (cat. no. 6202.0). The standard error of other estimates and movements may be calculated by using the spreadsheet contained in *Labour Force Survey Standard Errors, Data Cube* (cat. no. 6298.0.55.001).

## **COHERENCE**

The ABS has been conducting the Labour Force Survey each month since February 1978. While seeking to provide a high degree of consistency and comparability over time by minimising changes to the survey, sound survey practice requires careful and continuing maintenance and development to maintain the integrity of the data and the efficiency of the collection.

The changes which have been made to the Labour Force Survey have included changes in sampling methods, estimation methods, concepts, data item definitions, classifications, and time series analysis techniques. In introducing these changes the ABS has generally revised previous estimates to ensure consistency and coherence with current estimates. For a full list of changes made to the Labour Force Survey see Chapter 20 in *Labour Statistics: Concepts, Sources and Methods* (cat. no. 6102.0.55.001).

## **INTERPRETABILITY**

The ABS has been conducting the Labour Force Survey each month since February 1978. While seeking to provide a high degree of consistency and comparability over time by minimising changes to the survey, sound survey practice requires careful and continuing maintenance and development to maintain the integrity of the data and the efficiency of the collection.

The changes which have been made to the Labour Force Survey have included changes in sampling methods, estimation methods, concepts, data item definitions, classifications, and time series analysis techniques. In introducing these changes the ABS has generally revised previous estimates to ensure consistency and coherence with current estimates. For a full list of changes made to the Labour Force Survey see Chapter 20 in *Labour Statistics: Concepts, Sources and Methods* (cat. no. 6102.0.55.001).

## **ACCESSIBILITY**

Please see the Related Information tab for the list of products that are available from this collection.

## **Data Cubes (I-Note) - Data Cubes**

For datacube EQ08, in May 2017, there are two ANZSCO codes (8310 Food Process Workers nfd and 3990 Miscellaneous Technicians and Trades Workers nfd) that have not been included with their ANZSCO Major Group. This data appears at the bottom of the table and should be included when calculating totals for May 2017. This issue will be corrected in the May 2018 issue to be published in June 2018.

## **Time Series Spreadsheet (I-Note) - Time Series Spreadsheet**

Time Series Spreadsheets 24a and 24b do not currently include estimates for persons which a level of education could not be determined. This will be corrected in the release of May 2018 data, in June 2018. In the meantime, this information can be accessed from the Data Cube LQ1.

## **Time Series Spreadsheet (I-Note) - Time Series Spreadsheet**

Time Series Spreadsheets 24a and 24b do not currently include estimates for persons which a level of education could not be determined. This will be corrected in the release of May 2018 data, in June 2018. In the meantime, this information can be accessed from the Data Cube LQ1.

## **Time Series Spreadsheet (I-Note) - Time Series Spreadsheet**

For a better level estimate of public sector employment, including by level of government, the ABS recommends referring to the annual Employment and Earnings, Public Sector,

## **Time Series Spreadsheet (I-Note) - Time Series Spreadsheet**

For a better level estimate of public sector employment, including by level of government, the ABS recommends referring to the annual Employment and Earnings, Public Sector, Australia (cat. no. 6248.0.55.002).

## **Time Series Spreadsheet (I-Note) - Time Series Spreadsheet**

For a better level estimate of public sector employment, including by level of government, the ABS recommends referring to the annual Employment and Earnings, Public Sector, Australia (cat. no. 6248.0.55.002).

## **Time Series Spreadsheet (I-Note) - Time Series Spreadsheet**

For a better level estimate of public sector employment, including by level of government, the ABS recommends referring to the annual Employment and Earnings, Public Sector, Australia (cat. no. 6248.0.55.002).

## **Standard Errors**

Estimates from the Labour Force Survey (LFS) are based on information collected from people in a sample of dwellings, rather than the entire population. Hence the estimates produced may differ from those that would have been produced if the entire population had been included in the survey. The most common measure of the likely difference (or 'sampling error') is the Standard Error (SE).

The ABS considers that estimates with a relative standard error of 25% or more may be subject to sampling variability too high for most practical purposes.

To indicate those cells in spreadsheets with a relative standard error of 25% or more, annotations have been applied prior to dissemination.

In addition, the tables below have been supplied to show estimates at which the relative standard error is 25%. Estimates of the size indicated in the tables, or smaller, are considered to be subject to sampling variability too high for most practical purposes.

Due to the January 2011 flooding in Queensland the relative standard errors for January will be higher than normal in some regions, therefore for Queensland the estimates at which the



relative standard error is 25% will be higher than they appear in the tables below. However from February, the data returns to normal.

The Relative Standard Errors (RSE) for July 2013 (50% old sample, 50% new sample) and onwards will be subject to revisions in the future, as more information is known about the new sample after it has been introduced.

Additional information on how standard errors for LFS estimates are produced is available in Labour Force Survey Standard Errors, Data Cube (cat. no. 6298.0.55.001).

State	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
<b>Employed</b>									
Feb-78 — Sep-82	4.5	4.5	3.5	2.5	2.5	1.5	1.8	2.0	4.5
Oct-82 — Aug-87	4.0	4.0	3.0	1.8	2.0	1.0	1.8	1.3	3.5
Sep-87 — Feb-89	4.5	4.5	3.0	2.0	2.5	1.3	1.8	1.5	4.0
Mar-89 — Aug-92	4.5	4.5	3.0	2.1	2.3	1.3	2.0	1.4	3.5
Sep-92 — Aug-97	5.3	4.6	3.5	2.4	2.9	1.3	1.3	1.0	4.0
Sep-97 — Sep-98	5.9	4.5	4.1	2.4	2.8	1.1	1.0	1.1	4.4
Oct-98 — Feb-03	5.9	3.1	3.7	2.5	2.2	1.1	1.3	0.9	5.5
Mar-03 — Oct-07	6.3	3.0	4.4	2.3	2.5	1.3	1.5	1.1	6.6
Nov-07	6.2	3.2	4.3	2.3	2.5	1.3	1.4	1.1	6.4
Dec-07	6.1	3.4	4.3	2.3	2.6	1.3	1.3	1.1	6.2
Jan-08	6.0	3.6	4.2	2.3	2.6	1.3	1.3	1.2	6.0
Feb-08	5.9	3.8	4.2	2.4	2.7	1.3	1.2	1.2	5.9
Mar-08	5.9	4.1	4.2	2.4	3.0	1.2	1.1	1.2	5.7
Apr-08	5.8	4.4	4.4	2.5	3.1	1.3	1.0	1.3	5.6
May-08	5.7	4.7	4.3	2.5	3.1	1.3	1.0	1.3	5.4
Jun-08	5.5	4.9	4.3	2.5	3.3	1.3	1.0	1.3	5.3
Jul-08 — Aug-09	6.9	6.1	5.3	3.1	4.0	1.5	1.2	1.6	7.4
Sep-09	6.5	5.8	5.0	2.9	3.8	1.5	1.1	1.5	7.0
Oct-09	6.1	5.5	4.7	2.8	3.6	1.4	1.0	1.4	6.5
Nov-09	5.8	5.2	4.5	2.6	3.4	1.3	1.0	1.4	6.2
Dec-09 — Jun-13	5.5	4.9	4.3	2.5	3.3	1.3	1.0	1.3	5.8
Jul-13 — Jan-14	7.7	3.8	5.5	2.7	3.8	1.4	0.3	1.7	7.8
Feb-14 onwards	7.9	3.9	5.6	2.7	3.8	1.4	0.3	1.7	7.9
<b>Unemployed</b>									
Feb-78 — Sep-82	4.5	4.5	3.5	2.5	2.5	1.5	1.8	2.0	4.5
Oct-82 — Aug-87	4.0	4.0	3.0	1.8	2.0	1.0	1.8	1.3	3.5
Sep-87 — Feb-89	4.5	4.5	3.0	2.0	2.5	1.3	1.8	1.5	4.0
Mar-89 — Aug-92	4.5	4.5	3.0	2.1	2.3	1.3	2.0	1.4	3.5
Sep-92 — Aug-97	5.3	4.6	3.5	2.4	2.9	1.3	1.3	1.0	4.0
Sep-97 — Sep-98	5.9	4.5	4.1	2.4	2.8	1.1	1.0	1.1	4.4
Oct-98 — Feb-03	5.7	5.7	4.5	2.6	3.3	1.3	3.2	1.4	4.9
Mar-03 — Oct-07	6.0	5.4	4.9	2.9	3.6	1.6	2.2	1.6	5.2
Nov-07	6.1	5.4	5.0	2.9	3.7	1.6	2.1	1.7	5.2
Dec-07	6.2	5.5	5.0	2.9	3.8	1.7	1.9	1.7	5.2
Jan-08	6.3	5.6	5.0	3.0	4.0	1.7	1.8	1.8	5.2
Feb-08	6.4	5.7	5.1	3.0	4.1	1.7	1.7	1.8	5.1
Mar-08	6.7	5.7	5.2	3.1	4.5	1.8	1.6	1.9	5.1
Apr-08	6.8	5.9	5.5	3.2	4.6	1.9	1.5	1.9	5.2
May-08	6.9	6.0	5.5	3.3	4.8	1.9	1.4	2.0	5.1
Jun-08	7.1	6.1	5.6	3.3	5.0	1.9	1.4	2.1	5.1
Jul-08 — Aug-09	9.3	8.0	7.4	4.4	6.6	2.5	1.8	2.8	7.3
Sep-09	8.7	7.5	6.8	4.1	6.1	2.4	1.6	2.5	6.8
Oct-09	8.1	7.0	6.4	3.8	5.7	2.2	1.5	2.4	6.4
Nov-09	7.5	6.5	6.0	3.5	5.3	2.1	1.5	2.2	6.0
Dec-09 — Jun-13	7.1	6.1	5.6	3.3	5.0	1.9	1.4	2.1	5.7
Jul-13 — Jan-14	7.3	6.6	8.4	3.7	5.8	1.7	1.3	2.2	7.1
Feb-14 onwards	7.4	6.7	8.6	3.8	5.9	1.8	1.3	2.3	7.3
<b>NILF</b>									
Feb-78 — Sep-82	4.5	4.5	3.5	2.5	2.5	1.5	1.8	2.0	4.5
Oct-82 — Aug-87	4.0	4.0	3.0	1.8	2.0	1.0	1.8	1.3	3.5
Sep-87 — Feb-89	4.5	4.5	3.0	2.0	2.5	1.3	1.8	1.5	4.0
Mar-89 — Aug-92	4.5	4.5	3.0	2.1	2.3	1.3	2.0	1.4	3.5

Sep-92 — Aug-97	5.3	4.6	3.5	2.4	2.9	1.3	1.3	1.0	4.0
Sep-97 — Sep-98	5.9	4.5	4.1	2.4	2.8	1.1	1.0	1.1	4.4
Oct-98 — Feb-03	6.4	3.7	4.1	3.2	2.7	1.2	1.4	1.1	6.0
Mar-03 — Oct-07	7.8	3.7	5.2	3.0	3.2	1.5	2.0	1.3	7.3
Nov-07	7.6	3.9	5.1	3.0	3.2	1.5	1.8	1.3	7.0
Dec-07	7.4	4.1	5.1	3.0	3.3	1.5	1.7	1.4	6.8
Jan-08	7.3	4.4	5.0	3.0	3.4	1.5	1.6	1.4	6.6
Feb-08	7.1	4.7	5.0	3.1	3.5	1.5	1.5	1.4	6.3
Mar-08	7.1	5.0	4.9	3.1	3.8	1.5	1.3	1.5	6.2
Apr-08	7.0	5.4	5.3	3.2	3.9	1.5	1.2	1.5	6.0
May-08	6.8	5.7	5.2	3.2	4.0	1.5	1.1	1.6	5.8
Jun-08	6.6	6.0	5.2	3.2	4.1	1.5	1.1	1.6	5.6
Jul-08 — Aug-09	8.3	7.6	6.5	4.0	5.2	1.8	1.4	2.0	8.0
Sep-09	7.8	7.2	6.1	3.7	4.9	1.7	1.3	1.9	7.4
Oct-09	7.3	6.7	5.8	3.5	4.6	1.6	1.2	1.8	6.9
Nov-09	6.9	6.4	5.4	3.3	4.4	1.6	1.2	1.7	6.5
Dec-09 — Jun-13	6.6	6.0	5.2	3.2	4.1	1.5	1.1	1.6	6.2
Jul-13 — Jan-14	8.4	4.4	9.8	3.6	4.5	1.8	0.7	2.5	9.0
Feb-14 onwards	8.5	4.5	9.9	3.7	4.6	1.8	0.8	2.5	9.1

<b>Greater Capital City Statistical Areas</b>	<b>Feb-78 — Sep-82</b>	<b>Oct-82 — Aug-87</b>	<b>Sep-87 — Feb-89</b>	<b>Mar-89 — Aug-92</b>	<b>Sep-92 — Aug-97</b>	<b>Sep-97 — Sep-98</b>	<b>Oct-98 — Feb-03</b>
Greater Sydney	4.5	4.0	4.5	4.5	5.3	5.7	5.8
Rest of NSW	4.5	4.0	4.5	4.5	5.3	5.7	5.8
Greater Melbourne	4.5	4.0	4.5	4.5	4.6	4.6	3.3
Rest of Victoria	4.5	4.0	4.5	4.5	4.6	4.3	3.2
Greater Brisbane	3.5	3.0	3.0	3.0	3.5	3.7	3.4
Rest of Queensland	3.5	3.0	3.0	3.0	3.6	4.3	3.6
Greater Adelaide	2.5	1.8	2.0	2.1	2.4	2.4	2.7
Rest of South Australia	2.5	1.8	2.0	2.1	2.5	2.2	2.5
Greater Perth	2.5	2.0	2.5	2.3	2.9	2.6	2.3
Rest of Western Australia	2.5	2.0	2.5	2.3	2.9	2.8	2.2
Greater Hobart	1.5	1.0	1.3	1.3	1.3	1.1	0.9
Rest of Tasmania	1.5	1.0	1.3	1.3	1.3	1.1	1.1
	<b>Mar-03 — Feb-08</b>	<b>Mar-08 — Jun-08</b>	<b>Jul-08 — Oct-09</b>	<b>Nov-09 — Jun-13</b>	<b>Jul-13 — Jan-14</b>	<b>Feb-14 onwards</b>	
Greater Sydney	6.5	5.7	7.1	5.7	7.6	7.7	
Rest of NSW	6.4	5.6	7.0	5.6	7.5	7.6	
Greater Melbourne	3.2	5.1	6.4	5.1	4.0	4.0	
Rest of Victoria	3.1	5.0	6.3	5.0	3.9	3.9	
Greater Brisbane	4.1	4.0	5.0	4.0	5.9	6.0	
Rest of Queensland	4.4	4.3	5.4	4.3	6.3	6.4	
Greater Adelaide	2.5	2.7	3.4	2.7	3.0	3.0	
Rest of South Australia	2.4	2.5	3.1	2.5	2.8	2.8	
Greater Perth	2.6	3.5	4.3	3.5	3.9	4.0	
Rest of Western Australia	2.5	3.3	4.1	3.3	3.7	3.8	
Greater Hobart	1.1	1.1	1.4	1.1	1.3	1.3	
Rest of Tasmania	1.3	1.3	1.6	1.3	1.5	1.5	
<b>Statistical Area Level 4 Regions</b>	<b>Oct-98 — Feb-03</b>	<b>Mar-03 — Feb-08</b>	<b>Mar-08 — Jun-08</b>	<b>Jul-08 — Oct-09</b>	<b>Nov-09 — Jun-13</b>	<b>Jul-13 — Jan-14</b>	<b>Feb-14 onwards</b>
Central Coast	7.4	8.5	7.2	9.4	7.2	10.2	10.4
Sydney - Baulkham Hills and Hawkesbury	7.2	8.3	7.0	9.2	7.0	10.0	10.2
Sydney - Blacktown	7.3	8.3	7.1	9.3	7.1	10.0	10.2
Sydney - City and Inner South	8.5	9.7	8.3	10.8	8.3	11.7	11.9
Sydney - Eastern Suburbs	9.6	11.0	9.3	12.2	9.3	13.1	13.4
Sydney - Inner South West	7.3	8.4	7.1	9.3	7.1	10.1	10.3
Sydney - Inner West	7.7	8.8	7.5	9.8	7.5	10.6	10.8
Sydney - North Sydney and Hornsby	7.6	8.6	7.3	9.6	7.3	10.4	10.6
Sydney - Northern Beaches	7.8	8.9	7.6	9.9	7.6	10.7	10.9
Sydney - Outer South West	7.3	8.4	7.1	9.3	7.1	10.1	10.3
Sydney - Outer West and Blue Mountains	7.3	8.3	7.1	9.3	7.1	10.0	10.2

Sydney - Parramatta	7.8	8.9	7.6	10.0	7.6	10.8	11.0
Sydney - Ryde	7.7	8.8	7.5	9.8	7.5	10.6	10.8
Sydney - South West	7.5	8.6	7.3	9.6	7.3	10.4	10.6
Sydney - Sutherland	7.4	8.4	7.2	9.4	7.2	10.1	10.3
Capital Region	7.2	8.2	7.0	9.2	7.0	9.9	10.1
Central West	7.6	8.7	7.4	9.7	7.4	10.5	10.7
Coffs Harbour - Grafton	7.6	8.7	7.4	9.7	7.4	10.5	10.7
Far West and Orana	7.4	8.4	7.2	9.4	7.2	10.1	10.3
Hunter Valley exc Newcastle	7.1	8.1	6.9	9.0	6.9	9.8	10.0
Illawarra	7.6	8.7	7.4	9.7	7.4	10.5	10.7
Mid North Coast	7.5	8.6	7.3	9.6	7.3	10.3	10.6
Murray	7.6	8.6	7.4	9.6	7.4	10.4	10.6
New England and North West	7.6	8.7	7.4	9.7	7.4	10.5	10.7
Newcastle and Lake Macquarie	7.1	8.1	6.9	9.0	6.9	9.8	9.9
Richmond - Tweed	7.6	8.7	7.4	9.7	7.4	10.5	10.7
Riverina	7.6	8.6	7.4	9.6	7.4	10.4	10.6
Southern Highlands and Shoalhaven	9.0	10.3	8.7	11.4	8.7	12.3	12.6
Melbourne - Inner	4.1	3.9	7.2	9.4	7.2	5.2	5.3
Melbourne - Inner East	3.6	3.4	6.2	8.2	6.2	4.5	4.6
Melbourne - Inner South	3.7	3.5	6.4	8.4	6.4	4.7	4.8
Melbourne - North East	3.8	3.6	6.6	8.6	6.6	4.8	4.9
Melbourne - North West	3.7	3.6	6.5	8.6	6.5	4.7	4.8
Melbourne - Outer East	3.8	3.6	6.6	8.7	6.6	4.8	4.9
Melbourne - South East	3.6	3.4	6.3	8.3	6.3	4.6	4.7
Melbourne - West	3.5	3.4	6.1	8.1	6.1	4.4	4.5
Mornington Peninsula	3.6	3.5	6.4	8.3	6.4	4.6	4.7
Ballarat	4.0	3.8	6.9	9.1	6.9	5.0	5.1
Bendigo	3.8	3.7	6.7	8.8	6.7	4.9	5.0
Geelong	3.7	3.5	6.5	8.5	6.5	4.7	4.8
Hume	4.3	4.1	7.4	9.7	7.4	5.4	5.5
Latrobe - Gippsland	4.1	3.9	7.2	9.4	7.2	5.2	5.3
North West	3.9	3.7	6.8	8.9	6.8	4.9	5.0
Shepparton	4.3	4.1	7.4	9.7	7.4	5.4	5.5
Warrnambool and South West	3.7	3.5	6.5	8.5	6.5	4.7	4.8
Brisbane - East	4.1	5.1	5.1	6.7	5.1	8.1	8.2
Brisbane - North	4.1	5.2	5.1	6.7	5.1	8.1	8.3
Brisbane - South	4.2	5.2	5.2	6.8	5.2	8.2	8.4
Brisbane - West	4.1	5.2	5.1	6.7	5.1	8.2	8.3
Brisbane Inner City	4.2	5.3	5.3	6.9	5.3	8.4	8.6
Ipswich	4.0	5.0	5.0	6.5	5.0	7.9	8.1
Logan - Beaudesert	4.3	5.4	5.3	7.0	5.3	8.4	8.6
Moreton Bay - North	3.9	4.9	4.8	6.4	4.8	7.7	7.9
Moreton Bay - South	3.9	4.9	4.8	6.3	4.8	7.7	7.9
Cairns	4.9	6.2	6.1	8.0	6.1	9.7	9.9
Darling Downs - Maranoa	4.6	5.8	5.7	7.5	5.7	9.1	9.3
Fitzroy	4.2	5.3	5.2	6.9	5.2	8.3	8.5
Gold Coast	4.3	5.5	5.4	7.1	5.4	8.6	8.7
Mackay	4.2	5.3	5.2	6.9	5.2	8.3	8.5
Queensland - Outback	4.7	5.9	5.8	7.6	5.8	9.2	9.4
Sunshine Coast	4.3	5.4	5.3	7.0	5.3	8.5	8.7
Toowoomba	4.6	5.8	5.7	7.5	5.7	9.0	9.2
Townsville	4.7	5.9	5.8	7.6	5.8	9.2	9.4
Wide Bay	4.6	5.8	5.7	7.5	5.7	9.0	9.2
Adelaide - Central and Hills	3.3	3.1	3.3	4.3	3.3	3.7	3.8
Adelaide - North	3.3	3.0	3.3	4.3	3.3	3.7	3.8
Adelaide - South	3.4	3.1	3.4	4.4	3.4	3.8	3.9
Adelaide - West	3.7	3.4	3.7	4.8	3.7	4.1	4.2
Barossa - Yorke - Mid North	3.5	3.2	3.5	4.5	3.5	3.9	4.0
South Australia - Outback	3.7	3.4	3.7	4.8	3.7	4.1	4.2
South Australia - South East	3.1	2.8	3.1	4.0	3.1	3.5	3.5
Mandurah	2.4	2.8	4.0	5.2	4.0	4.6	4.7
Perth - Inner	3.1	3.5	4.9	6.5	4.9	5.8	5.9
Perth - North East	2.9	3.3	4.6	6.1	4.6	5.4	5.5
Perth - North West	2.8	3.2	4.5	5.9	4.5	5.2	5.3

Perth - South East	2.9	3.3	4.7	6.1	4.7	5.5	5.6
Perth - South West	2.7	3.1	4.3	5.7	4.3	5.0	5.1
Bunbury	2.4	2.8	4.0	5.2	4.0	4.6	4.7
Western Australia - Outback	2.8	3.3	4.6	6.0	4.6	5.4	5.5
Western Australia - Wheat Belt	2.6	3.0	4.2	5.5	4.2	4.9	5.0
Greater Hobart	0.9	1.1	1.1	1.4	1.1	1.3	1.3
Launceston and North East	1.3	1.5	1.5	1.9	1.5	1.7	1.8
Tasmania - South East	1.6	1.9	1.9	2.4	1.9	2.2	2.2
Tasmania - West and North West	1.3	1.6	1.6	2.0	1.6	1.8	1.8
Darwin	1.4	1.7	1.0	1.3	1.0	0.9	0.9
Northern Territory - Outback	1.4	1.7	1.0	1.3	1.0	0.9	0.9

---

© Commonwealth of Australia

All data and other material produced by the Australian Bureau of Statistics (ABS) constitutes Commonwealth copyright administered by the ABS. The ABS reserves the right to set out the terms and conditions for the use of such material. Unless otherwise noted, all material on this website – except the ABS logo, the Commonwealth Coat of Arms, and any material protected by a trade mark – is licensed under a Creative Commons Attribution 2.5 Australia licence